

Are Vacant Lots Vacant?

Project Learning Tree Activity #47

Program of Studies

Science:

- S-P-SI-1 (Ask simple scientific questions that can be answered through observations.)
- S-P-SI-2 (Use simple equipment (e.g., aquariums), tools (e.g., magnifiers, spoons), skills (e.g., observing, pouring), technology (e.g., video discs), and mathematics in scientific investigations.)
- S-P-SI-3 (Use evidence (e.g., observations) from simple scientific investigations and scientific knowledge to develop reasonable explanations.)
- S-P-SI-4 (Design and conduct different kinds of simple scientific investigations.)
- S-P-SI-5 (Communicate (e.g., speak, draw) designs, procedures, and results of scientific investigations.)
- S-P-SI-6 (Question scientific investigations and explanations of other students.)
- S-P-LS-1 (Organisms have basic needs (e.g., air, water, nutrients, light) and can only survive when these needs are met.)
- S-P-LS-6 (Organisms' patterns of behavior are related to the nature of organisms' environments. There are many different environments (e.g., deserts, rainforests) on Earth that support different types of organisms.)
- S-4-SI-1 (Ask simple scientific questions that can be answered through observations combined with scientific information.)
- S-4-SI-2 (Use simple equipment (e.g., plant lights), tools (e.g., rulers, thermometers), skills (e.g., describing), technology (e.g., electronic media), and mathematics in scientific investigations.)
- S-4-SI-3 (Use evidence (e.g., descriptions) from simple scientific investigations and scientific knowledge to develop reasonable explanations.)
- S-4-SI-4 (Design and conduct different kinds of simple scientific investigations.)
- S-4-SI-5 (Communicate (e.g., graph, write) designs, procedures, and results of scientific investigations.)
- S-4-SI-6 (Review and ask questions about scientific investigations and explanations of other students.)
- S-4-LS-1 (Organisms have basic needs (e.g., air, water, nutrients, light) and can only survive when these needs are met.)
- S-4-LS-7 (Organisms' patterns of behavior are related to the nature of organisms' environments. There are many different environments (e.g., deserts, rain forests) on Earth that support different types of organisms.)
- S-4-LS-9 (Organisms change the environment. These changes may be detrimental or beneficial.)
- S-5-LS-1 (Recognize the relationship between structure and function at all levels of organization (e.g., organ systems, whole organisms, ecosystems).)
- S-5-AC-3 (Recognize how science is used to understand changes in populations, issues related to resources, and changes in environments.)

- S-8-SI-1 (Identify and refine questions that can be answered through scientific investigations combined with scientific information.)
- S-8-SI-2 (Use appropriate equipment (e.g., barometers), tools (e.g., meter sticks), techniques (e.g., computer skills), technology (e.g., computers), and mathematics in scientific investigations.)
- S-8-SI-3 (Use evidence (e.g., computer models), logic, and scientific knowledge to develop scientific explanations.)
- S-8-SI-4 (Design and conduct different kinds of scientific investigations to answer different kinds of questions.)
- S-8-SI-5 (Communicate (e.g., write, graph) designs, procedures, and results of scientific investigations.)
- S-8-LS-4 (Investigate and analyze populations and ecosystems.)
- S-8-AC-3 (Recognize how science is used to understand changes in populations.)

Core Content

Science:

- SC-E-SI-1 (Ask simple scientific questions that can be investigated through observations combined with scientific information.)
- SC-E-SI-2 (Use simple equipment (e.g., magnifiers, magnets), tools (e.g., metric rulers, thermometers), skills (e.g., classifying, predicting), technology (e.g., electronic media, calculators, World Wide Web), and mathematics in scientific investigations.)
- SC-E-SI-3 (Use evidence (e.g., observations, data) from simple scientific investigations and scientific knowledge to develop reasonable explanations.)
- SC-E-SI-4 (Design and conduct simple scientific investigations.)
- SC-E-SI-5 (Communicate (e.g., draw, graph, write) designs, procedures, observations, and results of scientific investigations.)
- SC-E-SI-6 (Review and ask questions about scientific investigations and explanations of other students.)
- SC-E-3.1.2 (Organisms have basic needs. For example, animals need air, water, and food; plants need air, water, nutrients, and light. Organisms can survive only in environments in which their needs can be met.)
- SC-E-3.3.2 (The world has many different environments. Distinct environments support the lives of different types of organisms. When the environment changes, some plants and animals survive and reproduce, and others die or move to new locations.)
- SC-E-3.3.3 (All organisms, including humans, cause changes in the environment where they live. Some of these changes are detrimental to the organism or to other organisms; other changes are beneficial (e.g., dams built by beavers benefit some aquatic organisms but are detrimental to others).)
- SC-M-SI-1 (Refine and refocus questions that can be answered through scientific investigation combined with scientific information.)
- SC-M-SI-2 (Use appropriate equipment, tools, techniques, technology, and mathematics to gather, analyze, and interpret scientific data.)
- SC-M-SI-3 (Use evidence (e.g., computer models), logic, and scientific knowledge to develop scientific explanations.)
- SC-M-SI-4 (Design and conduct scientific investigations.)
- SC-M-SI-5 (Communicate (e.g., write, graph) designs, procedures, observations, and results of scientific investigations.)
- SC-M-SI-6 (Review and analyze scientific investigations and explanations of other students.)
- SC-M-3.5.1 (A population consists of all individuals of a species that occur together at a given place and time. All populations living together and the physical factors with which they interact compose an ecosystem.)
- SC-M-3.5.4 (The number of organisms an ecosystem can support depends on the resources available and abiotic factors (e.g., quantity of light and water, range of temperatures, soil composition). Given adequate biotic and abiotic resources and no diseases or predators, populations (including humans) increase at rapid rates. Lack of resources and other factors, such as predation and climate, limit the growth of populations in specific niches in the ecosystem.)
- SC-M-AC-2 (Describe the individual's roles and responsibilities in the following areas: changes in populations, resources and environments including ecological crises and environmental issues, natural hazards, science and technology in society, and personal and societal issues about risks and benefits.)

- SC-H-SI-2 (Use equipment, tools, techniques, technology, and mathematics to improve scientific investigations and communications.)
- SC-H-SI-3 (Use evidence, logic, and scientific knowledge to develop and revise scientific explanations and models.)
- SC-H-SI-4 (Design and conduct different kinds of scientific investigations.)
- SC-H-SI-5 (Communicate and defend the designs, procedures, observations, and results of scientific investigations.)
- SC-H-SI-6 (Review and analyze scientific investigations and explanations of other investigators, including peers.)
- SC-H-AC-2 (Explore the impact of scientific knowledge and discoveries on personal and community health; recognize how science influences human population growth, use science to analyze the use of natural resources by an increasing human population; investigate how science can be used to solve environmental quality problems, use science to investigate natural and human-induced hazards; and analyze how science and technology are necessary but not sufficient for solving local, national, and global issues.)